

Federation of Earth Science Information Partners Partnership Application

Please complete all sections to the fullest extent possible and forward completed application to: Carol Meyer, carol.meyer@earthsciencefoundation.org. If you have any questions, please contact her at 877.870.3747.

I. CONTACT INFORMATION

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B. Designated Assembly Representative (could be same as above)

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C. Other Contacts

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II. ABOUT YOUR ORGANIZATION

A. ORGANIZATION/DIVISION/PROJECT NAME:

University of Missouri – ICREST

University of Missouri – Missouri Spatial Data Information Service

B. OVERVIEW OF YOUR PRIMARY ACTIVITIES (250 words or less)

MSDIS is the Missouri Spatial Data Information Service, a spatial data retrieval and archival system. MSDIS operates under the guidance of the Missouri Geographic Information System Advisory Committee (MGISAC). MSDIS is responsible for data storage and access, standardization of both digital and tabular data, creation of the data dictionary, compilation of metadata, and statewide GIS user information networks. **MSDIS** has been funded by the state for the past 10 years to provide access, information and support for the implementation and integration of geospatial data and technologies across the state. This includes integration from local data sources, standardization, assessment, documentation, and loading as well as adoption of key words and capacities for harvesting from the national levels (Geospatial One Stop).

C. Please list and briefly describe the primary product(s) or service(s) that your organization provides (will provide) to the community.

The MSDIS does the following functions: receives, catalogs and archives databases; checks and verifies accuracy and integrity of data; maintains a database directory; maintains metadata; handles special data requests; provides download via FTP; provides conversion and integration services; handles user inquiries; provides user support for data; provides GIS education and training; conducts application conferences and workshops; presents at user conferences or other venues; and participates in national and regional planning activities. MSDIS currently provides access to over 12,000 vector files as well as current imagery (aerial and satellite) over the state.

This service is located at the Geographic Resources Center (GRC) at the University of Missouri - Columbia. The University is a Land Grant Institution and lends itself to the service and extension functions that such a service bureau supports. Federal agencies are also looking for places within each state to act as clearinghouses for the data sets created by their representative state affiliates. MSDIS meets this need through providing administrative and technical support services for the core geospatial database. In addition, service bureau capabilities are available to provide various products to state agencies and other clients. The MSDIS also serves as a point of contact for other entities with interest in accessing the core database.

The goal of the MSDIS is to encourage use of GIS technology and geographic data resources in government by providing practical support in the form of GIS-related services to current and potential users. This can be expressed in the following manner:

- To establish and make available to the GIS community in state and local government a core database of geographic information to be held and maintained in common as a continuing asset within an archive mechanism;
- To encourage development, maintenance, and dissemination of thematic databases built on the core database foundation;

- To encourage use of GIS technology and geographic data resources in state government by providing practical support in the form of geospatial services to current and potential user agencies, and
- To inform supervisors, managers, and other professionals in user agencies and state government at large about GIS technology, and its potential and capabilities in state government

To achieve these goals, the following tasks have been addressed:

- Developed and are maintaining a GIS database directory as a guide for GIS users throughout state government and beyond to the databases held by the state.
- Provide GIS development consultation and operational training. The MSDIS has made available, as an ongoing service, technical advice on GIS design, hardware and software selection and procurement procedures, database development, training and education, and GIS operation and applications.
- Defined through the Missouri Adaptive Enterprise Architecture database standards that will guide members of the Missouri GIS community of practice in database building and sharing. Standards have addressed such fundamentals as spatial accuracy and precision, currency and data maintenance, source documentation, database logic, and attribute coding. These standards meet or exceed established Federal standards for the same.
- Provide limited GIS services. The staff and facilities of the MSDIS will perform limited GIS services (such as custom map plotting or report generation) for users who have limited needs and no other access to the technology. Through such services, the MSDIS will extend familiarity with GIS technology and encourage wider use of the state GIS resources.
- Created an Internet presence (<http://msdisweb.missouri.edu>) through which access to these data can be obtained and shared including the physical exchange of hard copy graphics or data tapes and disks.
- Conduct annual applications conferences / workshops. The MSDIS hosts workshops to provide information on, and demonstration of, GIS applications within the Missouri GIS community. These conferences also provide participants with the current status and trends of this type of information within the nation and state.

D. Please give a main website address for the proposed Partnership:

Web Address: <http://msdisweb.missouri.edu>

III. HOW YOUR ORGANIZATION WILL BENEFIT FROM/CONTRIBUTE TO THE EARTH SCIENCE INFORMATION PARTNERS (ESIP) FEDERATION

- A. Describe current or anticipated users of your products and services and how you think the Federation can help you better serve this population. (200 words or less)

The current user base for the MSDIS would include the geospatial community of practice in Missouri and surrounding states specifically, and other users from federal or other groups outside the state. We hold an biennial user meeting that attracts 400 or so users from within the state. In the off-years we jointly hold a eight-state regional meeting that attracts 750 or so users from across the region. The specific site statistics show that over the past 3-month period (From **Jul-01-2006 00:05** To **Sep-30-2006 23:53**)(91 days, 23 hours) we have averaged the following:

Unique Visitors: 16,003

Homepage Hits: 15,203

Total Web Site Hits: 654,879

Bandwidth Used: 12.43 GB

Homepage Hits Average per day: 174

Webpage Views Average per day: 7,527

Unique Visitors Average per day: 183

- B. Describe any Earth science technologies that you have developed and are willing to bring to the Federation's efforts to provide best-practices. (200 words or less)

ICREST brings the following expertise to the ESIP Federation:

- Benchmarking processes
- Geospatial Enterprise Architecture
- Feature Extraction and Conflation Tools
- Performance Metrics for geospatial data access and integration

- C. Describe how your proposed membership would contribute to the efforts and the mission of one or more standing committees, working groups and/or clusters. See Page 3 for descriptions of the different activities of the various standing committees, working groups, and clusters. (200 words or less)

Standing Committees:

Community Engagement – *State Government – National States Geographic Information Council (NSGIC);*

Mr. Haithcoat is the *NASA Liaison Committee Chair*. This groups focus is on providing a liaison function between NSGIC (the states) and NASA to ensure an efficient and effective exchange of information regarding state and local government exposure, implementation, and implication of NASA's on-going work and application development.

Information Technology and Interoperability – *Geospatial Enterprise Architecture – Geospatial Profile*

Mr. Haithcoat is also called upon for his expertise in integrating remote sensing and geographic information technologies. He is one of two standing appointments to the Missouri Geographic Information Advisory Committee, the other being the State Geographic Information Officer. He currently chairs the Information Domain covering the areas of Geospatial Information Technologies, Knowledge Management, Database Management, and Data Management for the State of Missouri. He is chair of a similar effort for the National States Geographic Information Council (NSGIC) and has also served as co-chair of the Federal Geographic Data Committee Geospatial Architecture Team. He is currently serving on the drafting team for the Second Version of the Federal Enterprise Architecture's Geospatial Profile.

- D. Describe your own use of Earth science information and data and how you would see this use enhanced by your partnership in the Federation. (200 words or less)

Our use involves the integration of remote sensing and geographic information systems for solving application issues and their subsequent accuracy assessment and validation. We make use of satellite and airborne remote sensing systems for application to vegetation mapping and change detection, urban mapping, and geospatial information extraction and correction.

Since 1985 Mr. Haithcoat has been the Program Director and Senior Research Specialist of a multidisciplinary, applied research and teaching group involved in a broad range of activities relating to the

collection, storage, management, and analysis of spatial data. His responsibilities include project design and implementation, project cost estimation, project/staff coordination, training, and system administration activities. He has worked on more than 350 projects with public and private sector clients.

The primary focus is to develop and demonstrate remote-sensing based geospatial information products for applications that meet the needs of various federal and state government agencies. Research focuses on the development of geospatial information products within urban or urbanizing areas.

IV. YOUR CHOICE OF MEMBERSHIP TYPE. PLEASE PICK ONE.

ESIP-I (primarily a data archive center)



ESIP-II (primarily a research center)



ESIP-III (primarily applications and education)



ESIP-IV (primarily a sponsoring member)



V. Any other comments about your proposed membership and its relation to the Federation that you wish to provide.

Thank you for your application for partnership in the ESIP Federation.

List of Federation Committees and Clusters

Administrative Committees

Executive Committee: Comprised of all standing and administrative committee chairs, ESIP Type Representatives, the President and Vice President of the Federation. Oversight body for most day-to-day activities of the Federation, acts on behalf of the Assembly between meetings.

Constitution and Bylaws: Provides counsel on matters related to the constitution and bylaws and other related issues (e.g. amendments to government documents)

Finance and Appropriations: Oversees financial resources of the Federation, including the annual budgeting process.

Partnership: Reviews and processes all applications for membership before making applications available for review by members of the Federation. Deals with other membership-related issues.

Standing Committees:

Commercial Development: Promotes a forum wherein commercial development of Earth science information can be fostered.

Community Engagement: Provides a forum for the Federation to promote partner products and to engage new users for data products and services.

Education: Provides a forum to make accessible to educators and learners at all levels in both formal and informal educational contexts the Earth science data, information, tools, and curricula available within the ESIP Federation.

Information Technology and Interoperability: Provides a forum for discussing information technology and interoperability issues of the Earth science community and serves as a central point for activities in this realm.

Products and Services: Provides a forum for defining best practices and defining requirements for earth science products and services. Currently is involved in developing an inventory of partner products and services.

Clusters (presently active, April 2005):

GIS

Intelligent Systems

Air Quality